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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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03/03/2004

Heinz Hermening

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EXAMINER

NGUYEN, PHU HOANG

ART UNIT

PAPER NUMBER

1731

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DELIVERY MODE

06/13/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/792,353	HERMENING ET AL.	
	Examiner	Art Unit	
	Phu H. Nguyen	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-29 and 38-44 is/are rejected.
- 7) ☒ Claim(s) 30-37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

Claims 17 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) in view of Gallienne (U.S Patent No. 5832780) and further in view of Kawachi et al. (U.S Patent No. 4793847).

Regarding claim 17, Trudeau discloses an apparatus (corresponding to the claimed "apparatus" recited in the instant claim 17) for delivering mold charges, or "gobs", of molten glass to I.S. (individual section) forming machine (line 24-26, column 1). The apparatus delivers by gravity simultaneous to several mold charges of molten glass to each of a plurality of section of forming machine, one section at a time and in a predetermined order (line 40-45, column 1).

Trudeau also discloses the apparatus provide a plural deflector scoop arrangement (corresponding to the claimed "at least one scoop channel" recited in the instant claim 17) (line 64-65, column 1). Trudeau discloses the movable deflector scoop interposed between a flow feeder and inclined troughs to section of a forming machine, the scoop being oscillated in a horizontal plane to register its discharge end (corresponding to the claimed "second end" recited in the instant claim 17) with the receiving need of successive rigid troughs (corresponding to the claimed "scoop rotatable about an axis for aligning said second end of said scoop channel with said

stationary channels" recited in the instant claim 17). Trudeau further discloses each scoop having an upper open receiving end (corresponding to "first end" recited in the instant claim 17) beneath and coaxial with a bottom outlet of a glass feeder (line 54-60, column 1).

In Fig.2, Trudeau discloses a pinion (27) (corresponding to the claimed "a pinion attached to said scoop channel" recited in the instant claim 17) in gear box (26).

Trudeau discloses a motor (41) (corresponding to the claimed "an electrical motor for rotating" recited in the instant claim 17) that rotates said pinion and thereby rotating said scoop channel about said axis (line 8-29, column 3).

Trudeau discloses gear box (26) (corresponding to the claimed "gear train transmitting torque from said motor to said pinion" recited in the instant claim 17) in Fig.2. Gear box (26) includes a worm (39) (corresponding to the claimed "worm gear" recited in the instant claim 17) engaged with motor (41) by shaft (40). Trudeau shows in Fig.2 the worm (39) engaged with worm wheel (38) that rotates sector gear (28) (corresponding to the claimed "toothed wheel" recited in the instant claim 17); the sector gear (28) drives pinion (2) for effecting rotation of scoop channel upon rotation of said worm gear by said motor. Trudeau does not disclose mounting of the toothed wheel coaxially with the worm wheel. Gallienne discloses a compact (reduce overall dimensions, line 25-27, column 1) gear in Fig.1 that teaches the mounting of toothed gear (5) coaxially with worm wheel (3) which engaged with worm gear (2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce the overall dimension of the gear train by mounting the toothed wheel

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coaxially with the worm wheel. Furthermore, Trudeau does not expressly disclose the electrical motor is capable of rotating the screw in a reciprocating manner. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a conventional servo-motor as an electrical motor to control the position of the screw and rotating it in a reciprocating manner as taught by Kawachi (column 1, line 28-34). The modification of Trudeau machine will eliminate the carrier disk (36, fig. 2 of Trudeau) and its cam since the scoop will be rotate by the holder (30, fig. 2 of Trudeau) that is connected coaxially to worm wheel (38, fig. 2 of Trudeau) in the same way as pinion (4, fig. 1 of Gallienne) connected coaxially to gear wheel (3, fig. 1 of Gallienne) as taught by Gallienne to reduce space. Furthermore, the screw engaged with servo-motor to be rotated in a reciprocating manner.

Regarding, claims 23-27, Kawachi further discloses an invention to provide a simple and small gob distributing apparatus in a bottle making machine in which a scoop can be easily and accurately controlled. Kawachi discloses said apparatus having a feeder which feeds the gobs and a scoop which is actuated to distribute the gobs to desired chutes in a predetermined order, where in said scoop has a vertical shaft portion (corresponding to the claimed "sleeve" recited in the instant claims 23-27) which is rotatably supported by a body (corresponding to the claimed "housing" recited in the instant claims 23-27) of the apparatus and which provided, on its outer periphery, with a plurality of rollers (corresponding to the claimed "pinion" recited in the instant claims 23-27) located in a concentrically arrangement (line 4-20, column 2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention

was made to make a scoop channel comprises a housing, a sleeve rotatably mounted within said housing, pinion comprises an externally toothed ring surrounding said sleeve and attached thereto to rotate said sleeve.

Claims 18-22, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187), Gallienne (U.S Patent No. 5832780) and Kawachi et al. (U.S Patent No. 4793847) as applied to claim 17 above, and further in view of Fenton (EP0133775A2).

Regarding claims 18-21, the combination of Trudeau, Gallienne and Kawachi does not disclose the use of intermediate toothed wheel for transmission of torque from said tooth wheel which coaxially mounted with the worm wheel to said pinion. Fenton discloses annular pinions of the scoop channels are rotationally driven by the toothed crown either directly (Figs.1 and 3) or via a driving toothed wheel and an intermediate toothed wheel (Fig.7) (suggesting both driving mechanisms are functional equivalent). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute direct driving of pinions with intermediate toothed wheel as taught by Fenton. Furthermore, Trudeau discloses an invention to provide a plural deflector scoop arrangement comprising two generally scoops (line 64-66, column 1). Adding parts to provide more than two scoops would still be in the scope of providing a plural deflector scoop arrangement. The mere duplication of parts has no patentable significance unless a new and unexpected result is produced. See *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

Regarding claim 22, Fenton discloses gear (122, fig. 7) (corresponding to the claimed "intermediate toothed wheels" recites in the instant claim 22) engages with two pinions (120, fig. 7). Accordingly claim 22 is rejected.

Regarding, claims 38-40, Fenton (EP0133775A2) also discloses coupling connection between the electrical motor to worm gear (line 11-17, page 13). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a coupling connecting electrical motor to worm gear.

Claim 28, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187), Gallienne (U.S Patent No. 5832780), Fenton (EP0133775A2) and Kawachi et al. (U.S Patent No. 4793847) as applied to claim 23 above, and further in view of Bennett (U.S Patent No. 6318130). The combination of Trudeau, Gallienne, Fenton and Kawachi does not disclose a gob distributor with a cooling system.

Regarding claim 28, Bennett discloses an invention to maintain the same temperature in gob flow channels by having at least one liquid coolant passage integrated with each channel in parallel between source and return liquid coolant manifolds (line 4-19, column 2 and fig. 1) (functionally equivalent to the outer sleeve and the connection sleeve recites in the instant claim 28 since both are used to circulate coolant). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to improve uniformity of temperature of gob delivering by integrate liquid coolant to the outer sleeve of scoop channels.

Regarding claim 29, Bennett discloses an alternative way of cooling gob deflector is the conventional air-cooling method (line 62-64, column 3). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to open the cooling duct to the atmosphere and connect the cooling duct with cooling gas supply as an alternative way of cooling gob deflector.

Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) and Fenton (EP0133775A2) as applied to claim 17-19 above, and further in view of Struckmeier et al. (U.S Patent No. 5824129). The combination of Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780) and Fenton (EP0133775A2) does not disclose pivotally mounting of gob distributor on glass forming machine. Struckmeier discloses a preferably mounting of gob distributor (to achieve rapid and accurate adjustment of the gob distributor) on glass forming machine with a scoop swivellable about a vertical axis (corresponding to the claimed "reciprocally pivoting" recited in the instant claims 41-43), the centering pin is preferably concentric with respect to the swivel axis of the scoop. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have means for pivotally mounting gob distributor on glass forming machine for reciprocally pivoting gob distributor about a vertical axis to achieve rapid and accurate adjustment of the gob distributor.

Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trudeau (U.S Patent No. 3597187) and Gallienne (U.S Patent No. 5832780), Fenton

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(EP0133775A2) and Struckmeier et al. (U.S Patent No. 5824129) as applied to claim 41 above, and further in view of Fenton (US. Patent No. 4756736). Fenton (U.S Patent No. 4756736) discloses moving means (corresponding to the claimed "piston and cylinder" recited in the instant claims 44 and 45) and positioning means (corresponding to the claimed "positioning body" "positioning stop" "lever" recited in claims 44 and 45) (line 11-43, column 2). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the apparatus for distributing gobs in a glassware manufacturing machine with moving means to move the gob distributor to appropriate receiving forming machine and positioning means to position the gob distributor in the normal position.

Allowable Subject Matter

Claims 30-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 17-29 and 41-45 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu H. Nguyen whose telephone number is 571-272-25931. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

P/N
6/7/2007


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